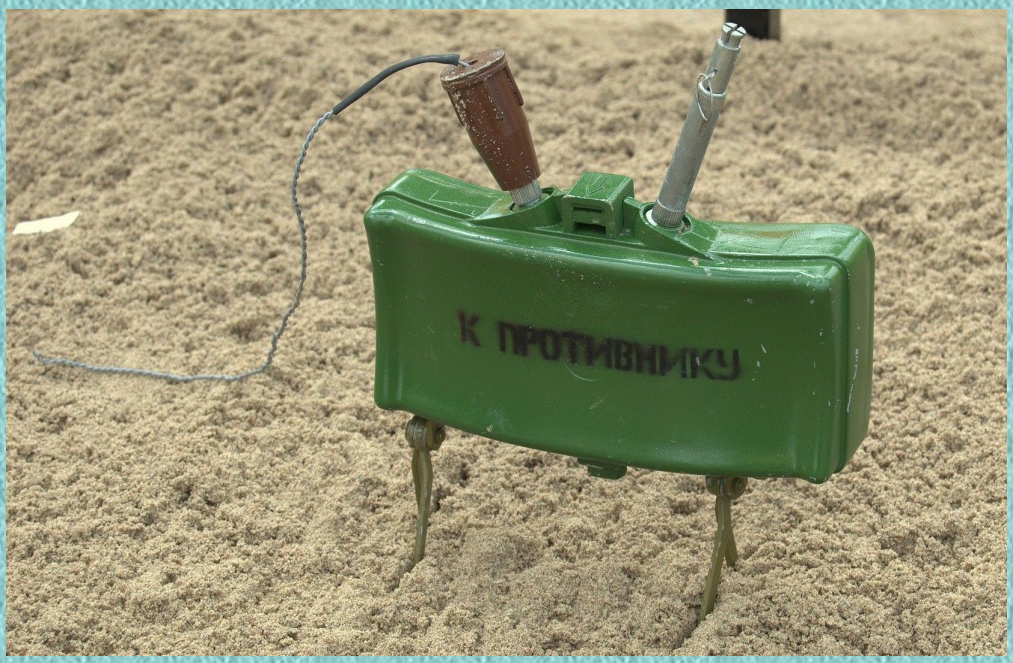
MINES



Yugoslavian Mines

DNG Giant Shotgun

Notes: This is a huge directional mine, which is primarily meant to kill personnel, but has some value against barbed wire and light armored vehicles. The mine is over 300mm in diameter, and fires 9mm steel balls at considerable force. The cone of steel balls is only 2 meters across at 50 meters, and so the blast is very concentrated. This mine is also used to clear dense foliage, and can clear concertina barbed wire coils 5 deep and two high. The Giant Shotgun can be detonated by tripwire or electrical command detonation. The Giant Shotgun can be easily defused, but is unaffected by overpressure (except to possibly knock it over). This mine is manufactured by Austria.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
DNG Giant Shotgun	8 kg	$1250	Directional AP-Demo	C20 B180D	4C	59

DNG Off-Route

Notes: This is an Austrian off-route antitank mine. A sensor is placed across the road up to 50 meters away, and the mine can be set to differentiate between light vehicles, light armored vehicles, and tanks. The mine can also be set to neutralize itself after a predetermined period of time. Hitting a vehicle with the DNG Off-Route is an Average: Grenade Launcher or Easy: Combat Engineer task. This mine can otherwise be neutralized only by destroying it, and is unaffected by overpressure. Note that its batteries burn out after 3 months of continuous operation.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
DNG Off-Route	13.5 kg	$1650	Off-Route Antitank	C16 B32	82C	Nil

Hirtenberger APM-1

Notes: This is an Austrian directional antipersonnel mine that was produced until 1994. It is similar in appearance to the US Claymore, but it is smaller, the fuse wells are on the sides and it has tripod legs. The mine uses 0.5g steel shot and projects 290 balls with considerable force. Several mines may be connected in a series, and it may be command or tripwire detonated. It may be disarmed at normal chances and is unaffected by overpressure.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Hirtenberger APM-1	1 kg	$160	Directional APERS	C2 B26	1C	4

Hirtenberger APM-2

Notes: This is a larger Austrian directional antipersonnel mine that was also produced until 1994. The mine also has 0.5g steel shot, but 1450 fragments are produced. Several mines may be connected in a series, and it may be command or tripwire detonated. It may be disarmed at normal chances, and is unaffected by overpressure.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Hirtenberger APM-2	2.95 kg	$470	Directional APERS	C7 B85	1C	13

NR-409

Notes: This Belgian antipersonnel mine is employed by some NATO countries as well as Iraq and several African nations. It is a minimal metal mine (detecting tasks are one level more difficult), and has an unusually low profile, and is usually colored green or sand brown. The mine cannot be disarmed, since the detonator is sealed inside the body, but is susceptible to overpressure and may detonate if an explosive charge is detonated nearby (25% likely per concussion dice value of the blast at that range). 8 kg of pressure on the mine are enough to detonate it.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
NR-409	0.18 kg	$3	APERS	C1 B1	Nil	9

NR-413

Notes: This is a Belgian stake-type antipersonnel mine. It may only be detonated by a tripwire. The mine is usually detected by a visual inspection of the area. It is easily disarmed, but may be detonated by as little as 2 kilograms of pressure on the tripwire. It is unaffected by overpressure, and only a direct hit by an explosive or small arms fire will detonate it. This mine is used in small numbers by Belgium and in large numbers by Rwanda.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
NR-413	0.64 kg	$64	Bounding APERS	C8 B16	13C	3

PRB M-3

Notes: This Belgian antitank mine is large and made mostly of plastic (detection attempts are two levels harder). It has two extra fuze wells to allow for booby trapping. The M-3 is waterproof and may be used on shores or other shallow waters. If not booby trapped, the mine is easily disarmed, and it is susceptible to overpressure (25% chance per concussion dice of damage in the area of the mine to cause a sympathetic detonation). 250 kg of pressure is required to detonate the mine. This mine is in use by some NATO countries, as well as Iraq and several African nations.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
PRB M-3	6.8 kg	$180	Plastic Antitank	C20 B25	79C	38

PRB M-35

Notes: This is a Belgian plastic antipersonnel mine of the toepopper variety. It affects only the person triggering it, and affects only the legs. Detection attempts against this mine are two levels harder. The mine is easily disarmed, and is susceptible to overpressure (25% chance of detonating per concussion dice applied over it). It is used by NATO and by several African nations. 9 kg of pressure is required to detonate the mine.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
PRB M-35	0.16 kg	$3	Plastic APERS	C1 B1	Nil	8

PRB M-966

Notes: This Belgian metallic mine is a bounding antipersonnel mine. When the mine detonates, a grenade ball is thrown into the air, detonating at head height, and double the normal fragments are directed into the victims' chest and head areas. The warhead is that of a 60mm mortar (HE shell). 4.5 kg of pressure is required to trip the mine; alternatively, a tripwire can be used, and 1 kg of pressure on the wire is required to detonate. The mine may be disarmed at normal chances, but is unaffected affected by overpressure. This mine is in use by NATO and Namibia.

Weapon	Weight	Price	Type	Damage	Penetration	DPV

PRB M-966	2.95 kg	$66	Bounding APERS	C5 B20	Nil	3

Addermine

Notes: This British Mine uses a LAW-80 antitank rocket launcher to create an off-route mine. The Addermine couples the LAW-80 to an acoustic sensor that triggers when heavy vehicle noise passes between 20 and 200 meters of the weapon. This sensor is only 25% likely to be fooled by other loud noises, is blast-resistant, and can be defused normally. The tripod and sensor may be recovered after the rocket is fired and reloaded with a fresh LAW-80 launcher. (These items weigh 2.5 kg.) The Addermine may also be command detonated from up to 200 meters away.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Addermine	12 kg	$600	Off-Route Antitank	C6 B4	120C	Nil

Barmine

Notes: The Barmine is a British antitank mine, named for its shape. The Barmine is 1.2 meters long, designed to attack a large part of the vehicle at once. The mine may be easily neutralized by turning the arming lever, but cannot be fully disarmed. It is laid lengthwise in the path of a vehicle, and due to its length, can defeat even vehicles equipped with mine rollers. 140 kg of pressure is required to detonate the mine. The Barmine is susceptible to overpressure, being 20% likely to go off per concussion dice applied to it. The Barmine is used by some NATO countries, India, and Kuwait, and some were captured by Iraq during the 1991 Persian Gulf War. This mine is largely made of wood and plastic and is two levels more difficult to detect with mine detectors.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Barmine	10.4 kg	$75	Plastic Antitank	C6 B16	126C	44

Mk 7

Notes: This is a conventional British Antitank mine. It may be easily neutralized by unscrewing the fuze and replacing it upside down. It is also susceptible to overpressure, being 20% likely to go off per concussion dice applied to it. The Mk 7 requires 150 kg of pressure to set it off. It may be set off by direct pressure or a tilt rod; this rod requires only 30 kg of pressure to detonate the mine. This mine has been extensively used in Africa and was supplied to Mujahidin rebels in Afghanistan, and is also used by NATO.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Mk 7	13.6 kg	$97	Antitank	C7 B16	142C	50

Ranger Barrier Mine

Notes: This British antipersonnel mine is normally laid in conjunction with the Barmine antitank mine, to keep combat engineers from disabling the Barmine fields. They are also used to rapidly lay defensive minefields, as the Ranger system (normally mounted on a Streaker load carrier vehicle or FV432 armored personnel carrier) can be lay mines at the rate of 1296 mines in 6 minutes. These mines are non-metallic and two levels harder to detect. They are one level harder to defuse without a special arming key. They are totally resistant to overpressure.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Ranger	0.19 kg	$3	Plastic APERS	C2 B2	1C	0.5

PM-79

Notes: This is a Bulgarian antipersonnel mine, similar to the Russian PMN, but smaller. The PM-79 requires a full 50 kg of pressure to operate, so most animals are unlikely to trigger it. The PM-79 has some resistance to overpressure and is only 10% likely per concussion dice applied to it to detonate. It may be disarmed, but as it cannot be neutralized before disarming, attempts are one level harder. The mine is made largely of plastic, and detection attempts are two levels harder. This mine is in use by Bulgaria and has been encountered in the Far East.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
PM-79	0.26 kg	$12	APERS	C3 B6	3C	21

PSM-1

Notes: This Bulgarian bounding antipersonnel mine may be detonated by pressure (8kg), a tripwire (1kg), or electrical command detonation. The warhead contains a grenade ball with 1200 6mm steel shot spheres; it detonates at 1.5 meters, and double the normal number of fragments is directed into the abdomen and chest areas. The PSM-1 may be disarmed at normal chances, and is unlikely to be affected by overpressure (5% chance of a sympathetic detonation per concussion dice directed at it). This mine is used by Bulgarian forces, and has been used in Cambodia since the Vietnam War.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
PSM-1	2.5 kg	$56	Bounding APERS	C3 B8	Nil	4

PTM-80P

Notes: This is a Bulgarian antitank mine of conventional metallic design. It is used in place of similar mines in Bulgaria, and has been sold on the open market. 150 kg of pressure are required to detonate it. The mine may be defused normally, and it is 25% likely to go off per concussion dice applied to it. The PTM-80P is waterproof, and may be used in waterlogged places such as shores and swamps.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
PTM-80P	8.93 kg	$235	Antitank	C27 B32	100C	48

TM-62M PZ

Notes: This Bulgarian antitank mine is based on the Russian T-62M, but is significantly different in appearance. The mine may be fused normally, requiring 150 kg to detonate; or a combined magnetic/acoustic fuse may be used, in which case the mine will detonate when a sufficient mass of metal or amount of noise (at least equivalent to a motorcycle) passes over it. In this case, the mine will usually detonate when the engine compartment passes over it. If the magnetic/acoustic fuse is used, the mine may be detonated 50% of the time when a mine detector is used, or 10% of the time if a knife blade is used to probe for it. If a normal fuse is used, the mine is 25% likely to go off per concussion dice applied to it.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
TM-62M PZ	9 kg	$270	Antitank	C25 B30	94C	45

C-3A2 Elsie

Notes: This is a Canadian shaped-charge antipersonnel mine. It directs its attack straight up, and affects only the person triggering it. It is used by Canada and Britain. The mine may be easily disarmed if one has the safety clip or a reasonable facsimile; otherwise, disarming attempts are normal. Normally, the mine is almost all plastic and two levels harder to detect with a mine detector; however, a metal ring may be fitted to allow it to be easily found. 7.25 kg of pressure is required to trigger the mine, and it is 15% likely to go off per concussion dice applied to it.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
C-3A2 Elsie	0.11 kg	$25	Shaped Charge APERS	C1 B1	4C	0.7

Model 1989

Notes: This is a Chinese antipersonnel mine, copied from the former East German PPM-2. There are two fuses available: a piezoelectric fuse that is sensitive to overpressure (25% chance of premature detonation per concussion dice applied to it), and an electronic fuse that is not affected by overpressure. The electronic fuse also has an antihandling feature that causes the mine to detonate if tilted more than 30 degrees. The mine may be easily disarmed when the normal fuse is used, but should be shot or blown in place if the electronic fuse is used. The Model 1989 requires 13 kg of pressure to trigger.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Model 1989	0.38 kg	$6	APERS	C2 B4	2C	11

Portable Bounding APERS Mine

Notes: The exact designation of this Chinese mine is unknown. It is meant to be an ambush weapon, easily emplaced and moved about. The tripwire takes 1.5 kg of pressure to trigger the mine, or the mine may be detonated by direct pressure of 7 kg. The mine's explosion kicks 4 minelets into the air in about a 15 meter radius, creating a shower of 6000 steel balls at a height of 0.2 to 0.5 meters. The mine causes double the normal number of fragments to be directed into the legs of the victims. The mine is unaffected by overpressure, but due to its "portable" feature, is easily disarmed once found.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Portable Bounding APERS	2.8 kg	$62	Bounding APERS	C6 B24	Nil	10

SAPEM

Notes: This Chinese toepopper mine is designed to be scattered from FASCAM shells and aircraft. The mine affects only the person triggering it, and the concussion and fragments affect only that person's legs. A 122mm FASCAM round containing SAPEM mines weighs 11 kg and carries 45 mines. The mine uses an electronic fuse with an antihandling feature that makes it an Impossible: Combat Engineer roll to disarm. Normally, the SAPEM is equipped with a self-destruct feature, but this mechanism tends to malfunction. The SAPEM takes 2 kg of pressure to set off, and thus even a kick will trigger it.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
SAPEM	0.09 kg	$1	APERS	C1 B1	Nil	0.2

SAPM

Notes: This Chinese FASCAM mine is a larger antipersonnel mine. The 122mm round containing the SAPM mines weighs 16 kg and carries 15 SAPM mines. Upon deploying, the mine shoots out two tripwires 10 meters in opposite directions and anchors them to the ground. The mine may be defused at normal probabilities. The SAPM is 10% likely to explode per concussion dice applied to it.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
SAPM	0.58 kg	$12	APERS	C1 B2	1C	6

Type 69

Notes: This Chinese mine is a bounding antipersonnel mine. The fragmentation ball detonates at 1.5m, and double the normal numbers of fragments are directed into the chest and abdomen areas of the victims. The mine may be detonated by direct pressure of 7 kg, or by a pull on a tripwire of 1.5 kg. The mine is easily disarmed, and is unlikely to be affected by overpressure (5% chance of a sympathetic detonation per concussion dice applied to it). The mine is used by the millions in China, and is also used in Afghanistan, Cambodia, Eritrea, and Ethiopia.

Weapon	Weight	Price	Type	Damage	Penetration	DPV

Type 69	1.35 kg	$30	Bounding APERS	C3 B8	Nil	2

Type 72 APERS

Notes: This Chinese antipersonnel mine is of the toepopper variety; the mine affects only the person who steps on it, and the blast and fragment damage is directed only into the legs of the victim. It is made largely of plastic, and is two levels more difficult to detect. The mine may be easily disarmed by someone who is familiar with the mine by rotating the top until the arming marks line up; however, there is also a version known as the Type 72B, which cannot be disarmed and will detonate if this procedure is done. The Type 72B is one level easier to detect, due to more metallic content. The Type 72 is susceptible to overpressure, and there is a 25% chance of detonation per concussion dice applied to it. 5kg of pressure is required for detonation. This mine is also manufactured by South Africa, and is used in large numbers by China, South Africa, Angola, Cambodia, Iraq, Kuwait, Mozambique, and Somalia.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Type 72 APERS	0.14 kg	$2	Plastic APERS	C1 B1	Nil	7

Type 72 Antitank

Notes: This Chinese mine is a minimal metal mine, and is one level more difficult to detect. This mine is very resistant to overpressure, and is only 1% likely to detonate per concussion dice applied to it. 300 kg of pressure is required to detonate it under normal circumstances. Disarming this mine requires a very tricky removal of the fuze; attempts to defuse this mine are one level more difficult than normal. This mine is also produced in South Africa, and used by those countries as well as Angola, Kuwait, and Somalia.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Type 72 AT	6.5 kg	$150	Plastic Antitank	C18 B22	71C	34

PD Mi-PK

Notes: This Czech off-route mine is actually 5 mines in one. The mine may be command-detonated, by a pressure plate up to 30 meters away, or by a tripwire suspended 700mm from the ground. The mine then fires 5 shaped charges into the target with a dispersion of 10-14 meters. The mine is issued with a camouflage net to cover the mine until it fires. Damage and Penetration for each charge are resolved separately, as is each hit number of the charges.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
PD Mi-PK	10.1 kg	$1250	Off-Route Antitank	C8 B12 (x5)	10C (x5)	Nil

PP Mi-Na

Notes: This is a Czech mine used in place of the PMN in the Czechoslovakian Army. It is a minimal-metal mine, two levels harder to detect with a mine detector. The mine can be scattered from helicopters and aircraft as well as emplaced manually. If one has the safety key, the mine may be easily neutralized; otherwise, the PP Mi-Na is one level harder to defuse than normal. The PP Mi-Na is 15% likely to be set off per die of concussion applied. 8 kg of pressure is required for detonation.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
PP Mi-Na	0.18 kg	$4	APERS	C1 B2	Nil	10

PP Mi-Sr

Notes: This bounding antipersonnel mine is manufactured by Czechoslovakia and used by that country and Afghanistan, Cambodia, Nicaragua, and several African nations. The grenade ball is blown 1.5 meters into the air, and double the normal numbers of fragments are directed into the chest and abdomen areas of the victims. The mine may be detonated by 3 kg of pressure, or by electrical detonation. The mine may be disarmed by simply unscrewing the detonator that protrudes from the top. It is unaffected by overpressure.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
PP Mi-Sr	3.2 kg	$70	Bounding APERS	C5 B16	Nil	8

PT Mi-Ba

Notes: This is an ancient Czech antitank mine, used since the 1950s. It can be laid mechanically or by hand. The PT Mi-Ba contains enough metal to be detected normally, though the body is made of bakelite. 200 kg of pressure is required to detonate, and it is 30% likely to detonate per concussion dice applied to it. The mine is obsolete, but many were trotted out of storage as newer mines were used up.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
PT Mi-Ba	7.83 kg	$205	Antitank	C21 B25	79C	38

PT Mi-U

Notes: This is a newer Czech antitank mine, used by Czechoslovakia in place of the Russian TM-series. It may be detonated by 150 kg of pressure, or 12 kg on a tilt-rod fuse. The mine is minimal-metal and is two levels harder to detect with a mine detector. If one has the locking key, the mine may be easily defused; otherwise, the mine is one level harder than normal. Overpressure also has a small chance of detonating it; 10% chance per concussion dice.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
PT Mi-U	9.96 kg	$260	Plastic Antitank	C28 B32	102C	49

Egyptian Bounding APERS Mine

Notes: This is a new antipersonnel mine, which had not yet been given an official designation before the start of the Twilight War. The fragmentation ball jumps to a height of one meter, inflicting twice the normal number of fragments into the legs and abdomens of the victims. The mine may be disarmed at normal chances, but is unaffected by overpressure. 12 kg of pressure is required for actuation, or a 2 kg pull on a tripwire.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Egyptian Bounding APERS	3 kg	$67	Bounding APERS	C6 B20	Nil	10

Alsetex ACPR

Notes: This is a French minimal-metal antitank mine, which may be laid mechanically or manually. The mine may be easily disarmed; indeed, the ACPR is meant to me recovered and re-laid elsewhere if not used. It may be re-set up to 5 times before it's arming becomes permanent and it must be totally defused and the arming mechanism replaced. This mine has almost no metal and is two levels more difficult to detect with a mine detector. It fuse is blast-resistant, and the ACPR is only 1% likely to detonate per die of concussion applied.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Alsetex ACPR	5.8 kg	$42	Plastic Antitank	C3 B8	64C	22

Alsetex M-51 MACI

Notes: This is a largely conventional French antitank mine. Three fuses are available: a conventional pressure fuse, a tilt-rod, and a "tentacle" fuze, with wide arms to increase the surface area over which the mine will activate. The mine may be booby-trapped with the auxiliary fuse well at the bottom of the mine. The M-51 is a plastic mine and is two levels harder to detect. With both pressure fuses, the operating force required is 300 kg.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Alsetex M-51 MACI	7 kg	$50	Plastic Antitank	C5 B12	101C	35

Alsetex M-61

Notes: This is a French antipersonnel stake mine. The mine may be easily disarmed if the safety cap is present; otherwise, allow normal disarming chances. The mine is non-metallic and is two levels harder to detect. 15 kg of pressure on the detonator is required for detonation. Another version of this mine, the M-63, has an antihandling device and will detonate if lifted.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Alsetex M-61	0.13 kg	$13	Plastic APERS	C5 B10	7C	7

Alsetex MAPED F1

Notes: This French directional antipersonnel is that country's counterpart to the US Claymore. It can be command detonated or, as is usually the case, initiated by tripwire. A pressure plate, connected to the mine by wire, may also be used. It may be disarmed normally, but is unaffected by overpressure.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Alsetex MAPED F1	1 kg	$160	Directional APERS	C2 B30D	Nil	5

Giat MIACAH F1

Notes: This is a large French off-route mine. It may be detonated by a tripwire, infrared sensor, acoustic sensor, or a time delay fuse. The mine is not affected by overpressure, and can distinguish between different-sized targets (as set when emplaced). The sensor must be disabled or the tripwire disconnected before the mine is neutralized, which is Difficult: Combat Engineer. The MIACAH is known to be in use by the French and British, and may be used by other NATO forces.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Giat MIACAH F1	12 kg	$1460	Off-Route Antitank	C7 B10	35C	Nil

HPD-1

Notes: This French antitank mine is also in service with at least one NATO country (probably Belgium). It may be laid manually or mechanically. The mine has a magnetic fuse that detonates it when a mass of metal at least equivalent to a motorcycle passes over it. It may be accidentally detonated 50% of the time when a mine detector is passed over it, or 10% of the time if even a knife blade probes it. The mine is not affected by overpressure, and is one level more difficult to defuse.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
HPD-1	7 kg	$70	Antitank	C5 B12	93C	33

MI AP DV 59

Notes: This is a small French mine of the toepopper type. It affects only the person triggering it, and directs all blast and fragment damage into the legs of the victim. It is sometimes known as the M-59, or Inkstand (due to its resemblance to an inkwell). It may be easily disarmed by removing the fuze, but is only 10% likely to detonate per dice of concussion applied to it. It is a plastic mine, so it is two levels harder to detect unless a special metal ring is clipped to it to allow easy detection. 5 kg or pressure is required to detonate the mine. This mine is used by the French and by Angola and Mozambique.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
MI AP DV 59	0.13 kg	$2	Plastic APERS	C1 B1	Nil	7

Improvised Antitank

Notes: This is a homemade antitank mine, consisting of a box filled with explosives and fitted with a pressure plate requiring 150kg to detonate (although this is highly variable). Similar mines are produced throughout the world. The mine has a 10% chance of misfiring.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Improvised Antitank	10 kg	$350	Nonmetallic Antitank	C16 B16	80C	26

Improvised APERS

Notes: This is a homemade Claymore mine, consisting of a metal backplate, a sheet of plastic explosive, and a layer of nails, scored wire, scrap metal, glass, and other such trash. It is normally detonated from a remote position, but a tripwire can be improvised. The mine has a 10% chance of misfiring. Similar mines are produced throughout the world.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Improvised APERS	3 kg	$75	Directional APERS	C3 B50D	Nil	9

Improvised Stake Mine

Notes: This is a form of antipersonnel stake mine, a primitive version of mines like the Russian ROMZ-2 and the World War 2 German M-43. It is easily-made and can actually made with parts of other mines and a grade of concrete that is home-made and not useable for building purposes. Both the Russians and Germans in World War 2 used them, and they are or have been used by guerilla forces such as the Viet Cong, the Mujahedin, and present-day insurgents and irregulars such as Chechen guerillas, Taliban, and Al-Qaida. The most complicated part of the mine is the fuze – it is a pull-type fuze actuated by a tripwire, and usually has to be scrounged from other explosives or explosive kits. You may also need a blasting cap, depending on the type of fuze available. If you want to get fancy, you can add a radio detonator, but the mine is so crude that it is usually not worth going to that kind of trouble. The mine is crude, but has the virtue of being unaffected by overpressure

Inside the mine is a small charge of whatever explosives are available – even a short length of dynamite can be impaled on the central stake. You then surround the mine with a cylinder of concrete, cement, or clay which has a lot of pebbles, nails, screws, chunks of metal, sharp rocks; whatever is jagged and available. You mount this on a stick of some sort that has a central spike on it, which can be as simple as a long nail. Let the clay, concrete, or whatever dry until it's nice and hard, then drive it into the ground like any other stake mine. Attach the tripwire. Voila. Simple and nasty. Like most improvised mines, the Improvised Stake Mine has a 10% chance of misfiring.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Improvised Stake	1.5 kg	$98	Antipersonnel	C4 B8	Nil	5

AT-2

Notes: This German antitank mine is scattered from FASCAM rounds fired from the LARS artillery rocket launcher, MLRS, and Skorpion minelayer. It is a shaped charge with an acoustic/magnetic sensor that does not require that the vehicle run directly over the mine with its treads or wheels. When it hits the ground, legs pop out and right the mine. It may be set for self-destruct, and it has an antihandling feature that makes defusing the mine an Impossible roll.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
AT-2	2.25 kg	$16	Shaped Charge Antitank	C1 B2	70C	Nil

DM-11 Antitank

Notes: This German mine is made almost entirely of molded explosive, strengthened with resin. The only non-explosive part of the mine is the fuse, in a well in the middle, and the handle, on the side. The DM-11 is two levels harder than normal to detect with a mine detector. 150 kg of pressure is required for detonation. The mine may be defused normally, and is only 5% likely per concussion die to be affected by overpressure.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
DM-11 Antitank	7.4 kg	$55	Plastic Antitank	C13 B30	109C	38

DM-11 APERS

Notes: This small German mine is a toepopper. It affects only the person triggering it, and directs all blast and fragment damage into the legs. It is a minimal-metal mine, one level harder to detect by mine detectors. If one has the safety sleeve or a reasonable facsimile, the mine can be disarmed. It is very resistant to overpressure, being only 1% likely to detonate per concussion dice applied to it. 5 kg of pressure is required to detonate the DM-11 APERS. The DM-11 APERS is in use by NATO and several African nations.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
DM-11	0.23 kg	$3	APERS	C1 B1	1C	12

DM-31

Notes: This is a German bounding antipersonnel mine, which, unusually, does not have a facility for tripwire detonation. The main charge detonates at 1.2 meters height, directing twice the normal number of fragments into the chest and abdomen. The mine may be disarmed at normal chances. It is unaffected by overpressure. 8 kg of pressure is required for detonation. This mine is used by NATO and Angola.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
DM-31	4 kg	$90	Bounding APERS	C8 B24	Nil	11

PARM-1

Notes: This is a German off-route mine. Over 50,000 copies were produced for the German Army by 1994. The projectile is fast and has high penetration. The PARM-1 may be fired by a tripwire, a pressure plate, or by command detonation. The batteries supply power for 40 days of continuous operation, after which the mine no longer functions. The range is 40 meters. Hitting a vehicle is an Average: Grenade Launcher or Easy: Combat Engineer task. The mine may be disarmed normally before this time, but is affected by overpressure.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
PARM-1	10 kg	$1200	Off-Route Antitank	C9 B8	120C	Nil

PARM-2

Notes: This is essentially a PARM-1 fitted with an infrared sensor that increases accuracy and range, as well as an improved warhead with greater penetration. The sensor can function and accurately attack vehicles moving at up to 80 kmh (Combat Move 111) and has a range of 100 meters. The batteries last for 30 days of continuous operation. The PARM-2 may skip up to 9 vehicles in a line before firing; this is determined when the mine is set. The PARM-2 may also be fired by command detonation.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
PARM-2	20 kg	$2500	Off-Route Antitank	C11 B12	150C	Nil

PM-60

Notes: This is one of the hundreds of thousands of antitank mines manufactured by the former East Germany before unification. It was used by the Germans when supplies of newer mines ran short. It is a huge mine, plastic in construction, and one level harder to detect. The mine may be booby-trapped using an auxiliary fuse well. The mine must be turned upside down to disarm, so it is often found with antihandling booby traps.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
PM-60	11.35 kg	$300	Plastic Antitank	C25 B32	99C	48

PPM-2

Notes: This plastic antipersonnel mine was produced by the former East Germany, and Germany inherited hundreds of thousands when that country unified. Although plastic-bodied, it contains a fair amount of metal, and may be detected at normal chances. Once armed, the mine cannot be disarmed. It is susceptible to overpressure, and is 25% likely to detonate per dice of concussion applied. 13 kg of weight is required for detonation. This mine is also used by Cambodia and some African nations.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
PPM-2	0.38 kg	$8	APERS	C1 B2	2C	12

SM-70

Notes: This was originally an East German border device to catch unwary would-be escapees. This mine has been copied throughout the missile east, South Asia, and Southeast Asia. The SM-70 is a crudely-made Claymore-type mine which was mounted on border fences and walls at about chest/head height, with 1-3-meter tripwires extending along the fence or wall in both directions, and a frame to attach the SM-70 to the surface upon which it is mounted. The idea is to catch fence or wall climbers. Sometimes the SM-70s were mounted near the bottom of the fence to catch fence-cutters. Their crude construction makes them amenable to construction in machine shops or even in one's garage or barn.

The SM-70 is essentially a metal cone, packed with explosives and with steel or lead balls about 9 millimeters in diameter. Some used a metal cone at the business end of the mine with a fragmentation jacket around the cone; this would not cause as much fragmentation damage, but would cause the effects of a HEAT explosion in addition to the fragmentation effect. (This would destroy any pieces of equipment, like a hand cart with clothing or suchlike.) In attrition, some used metal, glass, or concrete fragments instead of steel balls; for game purposes, the effect is the same. The SM-70 typically used 50 steel balls or about 80 fragments. The SM-70, however, tended to use wires with insufficient wires, and the East Germans has problems with the SM-70s detonating when lightning strikes hit fences or sometimes the surface itself if the surface to which it was attached was higher than surrounding buildings. (Give this a 1-10% chance to hit the fence or 1-5% to hit the surface, depending upon the intensity of the lightning storm.) Conceivably, wires could be hooked to the fence or even the mine frame. In addition, the mine would occasionally catch curious animals or fence and wood-climbers like squirrels.

Despite the amount of SM-70s that were employed by the East Germans (who always denied their use, even one escapee managed to disarms an SM-70, cross the border fence, and then sold the SM-70 to the then-West-German magazine *Der Spiegel*, who wrote an article on it) only nine escapees were known to have been caught by SM-70s.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
SM-70	2.5 kg	$40	Directional APERS	C1 B10	Nil	2
SM-70	2.5 kg	$45	HEAT/Directional APERS	C2 B8	5C	2

No. 6

Notes: This Israeli antitank mine is an improved version of the Russian TM-46. It is used by the thousands on Israel's borders, and also used by the British in the Falkland Islands. The No. 6 may be detonated by pressure (260 kg), or a tilt rod (12 kg). It may be easily disarmed, and is susceptible to overpressure (20% chance of detonation per concussion point applied to it).

Weapon	Weight	Price	Type	Damage	Penetration	DPV
No. 6	8 kg	$210	Antitank	C21 B25	79C	38

No. 12

Notes: This is an Israeli bounding antipersonnel mine, made of metal. It may be detonated by 12 kg of pressure, or by one of up to three tripwires that may be attached. It has been copied by Iran, and is used on Israel's borders and by her armed forces. It may be disarmed normally, but is unaffected by overpressure.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
No. 12	3.5 kg	$80	Bounding APERS	C7 B20	Nil	6

AUPS

Notes: The AUPS is an Italian antipersonnel mine. It is of simple construction, primarily of bakelite and with minimal metal. (Detection attempts are two levels harder.) The AUPS may only be disarmed by screwing a special cap onto the plunger; without that cap, disarming is impossible. The plunger is rather small, so the mine is rather resistant to overpressure (5% likely per concussion point applied of sympathetic detonation). 10kg of pressure on the plunger is required for detonation. This weapon is in use by Italy and Mozambique.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
AUPS	0.3 kg	$6	APERS	C1 B1	1C	11

BAT/7

Notes: This Italian antitank mine is normally used on shorelines and in swamps, since it does not float and is completely waterproof. It uses a magnetic fuse that can be set to detonate with the passing of vehicles as small as a motorcycle or as large as a landing craft. It may also be accidentally set off by a mine detector (50% chance) or a metal objects used for probing it such as a knife blade (10% chance when in direct contact). Optionally, an acoustic sensor may be used; this fuse detonates the mine when engine noise comes over the mine. If this fuse is used, the mine is 75% likely to detonate under the engine compartment of the vehicle. Loud noises have a 15% chance to prematurely set off the mine.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
BAT/7	5.6 kg	$50	Antitank	C7 B16	50C	20

BM/85

Notes: This is an Italian plastic bounding antipersonnel mine. It may be detonated by 12 kg of pressure, a tripwire, or command electrical detonation. The main charge explodes at a height of 0.45 meters, spraying twice the normal number of fragments into the legs of the victims. The mine may be defused normally, but finding it with a mine detector is two levels harder than normal. It is very resistant to overpressure (1% chance of a sympathetic detonation per concussion die applied to it).

Weapon	Weight	Price	Type	Damage	Penetration	DPV
BM/85	2 kg	$45	Bounding APERS	C6 B20	Nil	9

MAT/5

Notes: This Italian plastic antitank mine is virtually undetectable by mine detectors (Impossible task). It is also immune to overpressure, and will not detonate under devices such as mine rollers and flails. Even the direct application of an explosive charge is only 50% likely to detonate the mine prematurely. 180 kg of pressure is otherwise required to cause detonation. If the safety pin is inserted, the mine will not go off, even if the fuse is detonated. Once set, the mine is one level harder to defuse without this pin, and there is an antihandling device that detonates the mine if lifted. Another version of this mine, the MATS/2, is designed to be scattered from aircraft and FASCAM rounds, but is otherwise identical.

The MAT/6 is a larger relative of the MAT/5.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
MAT/5	7 kg	$70	Plastic Antitank	C4 B10	84C	29
MAT/6	7.1 kg	$75	Plastic Antitank	C5 B14	106C	37

Maus-1

Notes: This is a small Italian antipersonnel mine designed to be scattered from aircraft and helicopters. There is a safety pin manufactured for use with this mine, but any similar piece of metal may be used to neutralize the mine. 8.9 kg of pressure is required to detonate the mine.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Maus-1	0.27 kg	$5	APERS	C1 B1	Nil	1

P-25

Notes: This is an Italian antipersonnel mine of the stake type. It may be detonated by one of two tripwires that extend 15 meters from the mine. The P-25 is waterproof and will not float. It can be deployed buried and detonated by 12 kg of pressure, but the mine is not as effective in this mode and concussion and burst should be cut in half if the P-25 is buried. If one has the safety clip, the mine may be easily disarmed; otherwise, it is a normal task. The P-25 is unaffected by overpressure.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
P-25	0.7 kg	$70	APERS	C14 B28	11C	5

P-40

Notes: The P-40 is a bounding antipersonnel mine produced by Italy, and used by that country and Kuwait. It may be detonated by tripwire or direct pressure. The main charge is detonated 1 meter in the air, and twice the normal of fragments are directed against the victims' abdomens and legs. The mine is detonated by as little as 2kg of pressure on a tripwire, or 10kg of direct pressure. It can be

easily disarmed, but is unaffected by overpressure.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
P-40	1.5 kg	$34	Bounding APERS	C7 B20	Nil	10

SB-81

Notes: The SB-81 is an Italian plastic antitank mine that is designed to be scattered by FASCAM artillery rounds. It functions regardless of which way is up. Since it is minimal metal, detection attempts are one level harder if the mine is buried; however, this is usually not a problem, since the mine is usually found on top of the ground. The SB-81 cannot be disarmed once armed, and it is extremely resistant to overpressure (only a 1% chance of a sympathetic detonation per concussion dice applied to it). This mine is used in Italian FASCAM rounds, and is also employed by the British, Spanish, and Portuguese. It is has also been employed in helicopter-borne mine dispensers by those countries, and may be emplaced by hand.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
SB-81	3.3 kg	$86	Plastic Antitank	C8 B10	29C	14

SB-MV/1

Notes: The SB-MV/1 is a newer Italian antitank mine that is designed to be mechanically laid, but may also be manually laid. It is a magnetic mine, actuated by the passing of a mass of metal at least the size of a motorcycle. The amount of metal triggering it may be adjusted so that a larger size of vehicle must pass over before triggering it. The SB-MV/1 may also be accidentally triggered by magnetic mine detectors (50% chance), or by being probed by metal instruments such as a knife (10% chance). The mine cannot be disarmed once armed, and should be destroyed from a distance. The SB-MV/1 also has an antihandling feature that will detonate the mine if it is tilted more than 30 degrees. 150 kg of pressure is required to detonate.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
SB-MV/1	5 kg	$37	Antitank	C4 B10	37C	13

SH-55

Notes: This is a type-standard antitank mine manufactured by Italy, and also used by Afghanistan. It is a minimal metal mine, one level harder to detect. Normally, it is easy to disarm by unscrewing the fuze assembly; however a special anti-handling fuze exists for this mine that will cause the mine to detonate if this attempted. This fuze also can be set for self-destruction after a certain amount of time. The SH-55 is extremely resistant to overpressure (1% chance of detonation per concussion dice applied to it). 180 kg of pressure is required to detonate the mine.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
SH-55	7.3 kg	$190	Plastic Antitank	C19 B24	72C	34

TC/2.4

Notes: This is a minimal metal Italian antitank mine that is designed to be used on shores and marshes. It is waterproof and salt-proof and does not float. The TC/2.4 is immune to overpressure, and finding it with a mine detector is two levels harder. Defusing is one level harder without the safety key. The TC/2.4 is used when larger mines are not needed.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
TC/2.4	3.3 kg	$85	Plastic Antitank	C8 B10	31C	15

TC/3.6

Notes: The TC/3.6 is a minimal metal Italian antitank mine. It is newer and lighter than the SH-55, and is also used by Portugal and Afghanistan. It cannot be disarmed by unscrewing the fuze assembly and the detonator assembly, but is extremely resistant to overpressure (1% chance of sympathetic detonation per concussion dice applied to it). It is very difficult to detect, being two levels harder. The TC/3.6 requires 180 kg of pressure to detonate.

The TC/6 is a much larger version of the TC/3.6. It is disarmed in the same manner, and has the same lack of vulnerability to overpressure. It requires 180kg to trigger. In addition to Italy, Portugal, and Afghanistan, the TC/6 is also used by Egypt.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
TC/3.6	6.8 kg	$175	Plastic Antitank	C12 B16	47C	22
TC/6	9.6 kg	$250	Plastic Antitank	C20 B26	78C	37

TS-50

Notes: This Italian antipersonnel mine is also used by Egypt, Singapore, Kuwait, and Rwanda. It is a toepopper mine; it affects only the person triggering it, and directs all concussion and fragments into the legs. This mine requires the plastic safety cap to disarm, as well as removing the fuze assembly. 12.5 kg of pressure is required to detonate the mine. It is easily detected due to its metallic content, and is extremely resistant to overpressure (1% chance per concussion dice applied of a sympathetic detonation). The TS-50 was designed to be scattered from FASCAM rounds and helicopter dispensers.

The VS-50 is the hand-emplaced version of the TS-50, though it may also be scattered by vehicle-mounted dispensers. It can be easily defused, but is extremely resistant to overpressure, being only 1% likely to be detonated per concussion dice applied. 10 kg of

pressure is required to detonate it.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
TS-50	0.19 kg	$4	APERS	C1 B1	1C	3
VS-50	0.19 kg	$4	APERS	C1 B1	1C	2

Valmara 59/69/VS-JAP

Notes: This Italian bounding antipersonnel mine, usually designated simply V-59, is copied by South Africa and Singapore, and used by those countries as well as by Angola, Iraq, Kuwait, and Mozambique. The grenade ball explodes at 1 meter, and double the normal numbers of fragments are directed into the legs and abdomens of the victims. The mine may be easily defused, but is unaffected by overpressure. The V-59 is sensitive to stabbing, and a knife or other sharp instrument should not be used to probe for it. (You really shouldn't use knives to probe for mines anyway.) 10 kg of pressure is required to detonate, or a pulling force of 6 kg on a tripwire. If the main charge does not go off within 3 seconds of the grenade being ejected, a secondary fuze detonates the grenade.

The VS-JAP (ValSella Jumping AntiPersonnel) is an updated version of the V-69; it is made almost entirely of plastic, except for the 1200 steel cubes it produces as fragments. It is lighter in weight, but uses a larger explosive charge.

The Valmara 59 is an earlier form of the V-69, distinguished by its greater metal composition.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
V-59/69	3.2 kg	$90	Bounding APERS	C6 B18	1C	9
VS-JAP	2.8 kg	$90	Bounding APERS	C7 B20	1C	10

VAR/40

Notes: The VAR/40 is an Italian toepopper mine made of resin plastic. It is fully waterproof and nonbuoyant, and hundreds of thousands were seeded to protect Italian seashores during the Twilight War. The mine may be made safe by removing the detonator and screwing in a safety cap, otherwise, normal chances of disarming are allowed. All damage from this mine is applied only to the legs of the victim, and the VAR/40 only affects the individual stepping on it. 12 kg of pressure is required for detonation.

The VAR/100 is a larger version of the VAR/40. It is also a toepopper, and the same damage rules apply, but in addition, it is capable of damaging light vehicles.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
VAR/40	0.11 kg	$2	APERS	C1 B1	Nil	1
VAR/100	0.17 kg	$4	APERS	C1 B1	1C	2

VAR/100/SP

Notes: Though it has a similar name, this mine is not related to the VAR/100, being much larger and having a fragmentation casing. It is waterproof and does not float, and is primarily used on shorelines and in marshes. It may be buried or used as a stake mine, and detonated by pressure (12 kg) or a tripwire (6 kg). The mine is easily disarmed with the safety pin or similar piece of metal. It may be prematurely detonated with an explosion; there is a 15% chance per concussion die applied.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
VAR/100/SP	1.77 kg	$25	APERS	C2 B8	Nil	3

VS-1.6/2.2/3.6

Notes: This small Italian antitank mine is primarily used for disabling, rather than destroying, armored vehicles. It is designed to be scattered from helicopter dispensers. It can be disarmed, but cannot be neutralized before disarming, so those attempts can be tricky. The mine is detonated by 180 kg. It is extremely resistant to overpressure, being only 1% likely per concussion dice applied to detonate. It is a plastic mine, and two levels harder to detect. The VS-1.6 is built by Italy, and used by her and Iraq and Kuwait. Hundreds of thousands were emplaced in the 1991 Gulf War, and haven't all been found.

The VS-2.2 is a larger Italian scatterable antitank mine. It is also a plastic mine, and two levels more difficult to detect using mine detectors. Like the VS-1.6, disarming this mine is tricky, since it cannot be neutralized prior to removing the fuze assembly. It is extremely resistant to overpressure; the mine is only 1% likely to explode from overpressure per die of concussion applied.

The VS-3.6 is larger version of the VS-2.2 plastic antitank mine described above. Unlike that mine, the VS-3.6 is normally emplaced manually. Otherwise, the same rules apply as those of the above mine.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
VS-1.6	3 kg	$78	Plastic Antitank	C6 B8	24C	11
VS-2.2	3.5 kg	$90	Plastic Antitank	C7 B10	29C	13
VS-3.6	5 kg	$129	Plastic Antitank	C11 B16	47C	21

VS-APFM1

Notes: This is an Italian bounding antipersonnel mine with an advanced electronic fuse. 10 minutes after arming, three 7-meter tripwires are ejected from the mine, anchoring themselves automatically. After that point, pressure on any tripwire of 0.5 kg or greater will trigger the mine. The main charge is fired to waist height, inflicting twice the normal number of fragments on the abdomens and chests of the victims. It may be programmed to self-destruct up to 365 days after arming. The mine may be disarmed with a simple

switch. It is not subject to overpressure.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
VS-APFM1	3.5 kg	$78	Bounding APERS	C7 B20	Nil	11

VS-AT4

Notes: This is an Italian antitank mine with a considerable degree of overpressure resistance (only 1% likely to detonate per die of concussion applied). The mine self-destructs anywhere up to 365 days after arming, and also has an antihandling feature that causes it to detonate when lifted if the mine is not disarmed first. The fuse can distinguish between a vehicle and a mine plow, mine roller, or mine flail, and will, for example, detonate under a demining vehicle and not its flail.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
VS-AT4	6 kg	$155	Antitank	C12 B18	53C	24

VS-DAFM

Notes: The VS-DAFM 1 mine is basically an Italian version of the US Claymore mine. It may be detonated by tripwire or by electrical detonation, and has some value against light armored vehicles. It may be disarmed at normal chances, but is unaffected by overpressure.

The VS DAFM 7 is a larger Italian directional antipersonnel mine, used to saturate a larger area with ball bearings or deal with heavier vehicles. It may be disarmed at normal chances. It may be detonated by tripwire or by electrical command detonation.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
VS-DAFM 1	3.6 kg	$570	Directional APERS	C7 B80D	1C	18
VS-DAFM 7	10.7 kg	$1700	Directional APERS	C10 B150D	3C	54

VS-MK2

Notes: This is a round-shaped blast-type antipersonnel mine built by Valsella, an Italian defense manufacturer which went out of business when Italy joined the Ottawa Treaty. The VS-MK2 is a toepopper mine, meaning that it is not designed to kill but instead produce crippling injuries which require several soldiers to be taken out of action to aid the injured soldier. It is a minimal metal mine, and mine detectors are only 10% likely to find a VS-MK2. The mine will also function in up to one meter of water or liquid. Sudden overpressure will also not trigger the VS-MK2, as constant pressure is required to detonate it. In addition to hand-emplacement, the VS-MK2 may be scattered by dispensers.

A variant, the VS-MK2-EL, has an electronic anti-handling component to its fuze: Tilting the mine more than 20 degrees in either direction will result in detonation of the mine.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
VS-MK2	0.14 kg	$3	APERS	C1 B1	1C	2

MN-111

Notes: This Polish antitank mine is designed to be scattered from aircraft and helicopters. Upon impact with the ground, six petals unfold and put the mine in the right orientation. The mine must be dropped from at least 100 meters for proper arming and to sink the proper depth into the ground. The mine is detonated by pressure, by the magnetic field of a passing vehicle at least 500 kg in size, or by an attempt to move or disturb the mine. Disarming attempts are tricky (one level harder), and the mine is 50% likely to be set off by a mine detector, or 10% likely to be set off by probing with a metal instrument such as a knife blade. The MN-111 is unaffected by overpressure.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
MN-111	3.5 kg	$92	Antitank	C9 B10	35C	17

MN-121

Notes: This is a Polish scatterable antitank mine dispensed from aerial pods and FASCAM artillery rocket rounds. The mine descends on a parachute to ensure proper orientation upon landing. The mine requires a minimum drop of 100 meters to arm properly. The fuse is magnetic, triggered by the passing of a vehicle of at least 500 kg; this fuse can also be triggered by a mine detector (50% chance) or a knife blade-sized metal object probing it (10% chance upon direct contact). As this mine rests on top of the ground, it is normally easy to detect. The MN-121 is unaffected by overpressure.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
MN-121	2.8 kg	$74	Antitank	C9 B10	35C	17

MPP-B Wierzba

Notes: This Polish antitank mine is of conventional construction. It is very similar to the Russian TM-62 and can be laid mechanically or manually. The MPP-B has a provision for booby-trapping in the base of the mine. The normal fuse requires 200 kg of pressure to detonate, but an alternate magnetic fuse is available. The magnetic fuse requires the passing of a vehicle of 500 kg or larger; but it is 50% likely to be set off by a mine detector, or 10% likely by direct probing by a knife or similar-sized metal object. The magnetic fuse can also be set off by pressure.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
MPP-B	10.5 kg	$315	Antitank	C28 B34	106C	51

Directional Antipersonnel Mine

Notes: This Romanian mine's proper designation was not known as the Twilight War commenced. It is a simple box with fuse wells, containing cast TNT embedded with 1450 3-gram fragments. It is a huge mine, with an explosive charge of 12 kilograms. The mine may be command-detonated or by a tripwire, and several mine may be chained together for series detonation. It is unaffected by overpressure, and may be disarmed at normal chances.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Directional APERS Mine	19 kg	$2970	Directional APERS	C48 B200	5C	142

Lightweight Antipersonnel Mine

Notes: This mine was new issue to Romanian forces at the outset of the Twilight War, and its true designation was never known to Western forces. It is a toepopper mine; the mine affects only the individual triggering it, and all the concussion and fragment damage is directed into the legs. This mine was often carried by Romanian patrols to drop in the path of pursuing enemies, as it is quickly and easily set. It is a plastic mine, two levels harder to detect with a mine detector. It may be disarmed normally, but was normally blown in place, and NATO forces in Romanian territory usually carried concussion grenades to deal with these mines. It is susceptible to overpressure, being 25% likely to go off per concussion die applied.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Lightweight APERS	0.11 kg	$2	APERS	C1 B1	Nil	5

MAI-75

Notes: This Romanian-made plastic antipersonnel mine is used by Bloc forces and by Angola. It is very difficult to detect with mine detectors; two levels harder. This mine is usually paired with an antitank mine, often with the MAI-75 on top of the antitank mine to set it off at its greater sensitivity, since the MAI-75 requires only 5 kg of pressure to detonate. The mine is easily neutralized and disarmed, and is susceptible to overpressure (25% chance per concussion dice applied to it of a sympathetic detonation).

Weapon	Weight	Price	Type	Damage	Penetration	DPV
MAI-75	0.3 kg	$5	Plastic APERS	C2 B4	2C	12

MAT-62B

Notes: This minimal-metal Romanian mine started replacing the MAT-76 in Romanian service just before the Twilight War. It is two levels harder to detect with a mine detector. The MAT-62B is detonated by a pressure fuse requiring 200 kg to actuate. It generally causes a considerable amount of damage to vehicles triggering it. It cannot be neutralized once armed, making disarming attempts one level harder. It is somewhat susceptible to overpressure, 15% likely to go off per concussion dice applied.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
MAT-62B	9.8 kg	$255	Plastic Antitank	C25 B30	105C	45

MAT-76

Notes: The MAT-76 is a very large minimal-metal antitank mine made by Romania and used by Bloc forces, Kuwait, and several African nations. It is a large block of TNT with a detonator, encased in glass-fiber resin. The MAT-76 is two levels harder to detect. This mine cannot be neutralized once armed, making disarming attempts very tricky (one level harder.) The MAT-76 is triggered by 200 kg pressure. It is also susceptible to overpressure, and is 25% likely to go off per concussion point applied to it.

Weapon	Weight	Price	Type	Damage	Penetration	DPV

MAT-76	10 kg	$260	Plastic Antitank	C33 B40	125C	60

KhF-2

Notes: This Russian mine releases a cloud of gas throughout the burst radius. It can be detonated by tripwire or a remote position outside the burst radius:

Weapon	Weight	Price	Type	Damage	Penetration	DPV
KhF-2	10 kg	$1400	Chemical	C6 (B50)	Nil	3

MON-50

Notes: This Russian directional antipersonnel mine is a close copy of the US M-18A1 Claymore. It is normally employed spiked to a tree, but may be set on the ground. It may be electrically detonated, or by a tripwire (10 kg to detonate). The mine may be disarmed normally (similar to the MON-100 below). It is unaffected by overpressure. This mine was copied by Chile, China, North Korea, and Vietnam; it is also used by Afghanistan, Cambodia, Nicaragua, and several African nations.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
MON-50	2 kg	$280	Directional APERS	C3 B50D	Nil	8

MON-100

Notes: This is a large Russian directional antipersonnel mine, identical in concept (if not design) to the US Claymore. It is normally mounted on trees, though its spike may be stabbed into the ground. The mine may be command detonated (electrically) or by a tripwire; if a tripwire is used, 10kg or pressure is required for detonation. The mine may be disarmed by cutting the electric circuit or carefully releasing the tripwire, then unscrewing the fuze. It is unaffected by overpressure. This mine was copied by the Vietnamese and used during its war with the US; it is also used by Afghanistan, Cambodia, and several African nations.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
MON-100	5 kg	$790	Directional APERS	C9 B100D	Nil	23

MPM

Notes: This Russian weapon is a limpet mine; it has a magnetic base to allow it to be attached to metal targets such as tanks (and then the user runs away fast). The mine cannot be neutralized once armed, but the fuze may be removed to disarm it. It is unaffected by overpressure, or even by stepping on it or running over it.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
MPM	0.73 kg	$16	Limpet	C3 B6	5C	34

MS-3

Notes: This is a Russian antipersonnel mine similar to the PMN, but somewhat larger. It is normally used in booby traps, and requires 6kg of pressure to detonate. It is often placed on top of or underneath antitank mines to increase their sensitivity or create a trap for those removing the antitank mine. This mine is also manufactured in Romania, and used in Afghanistan.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
MS-3	0.63 kg	$26	APERS	C5 B10	5C	13

OZM-3

Notes: This is a more normal Russian bounding antipersonnel mine, similar to the US M-16A1. It may be electrically or tripwire detonated. The OZM-3 may be disarmed with normal chances, but is unaffected by overpressure. It is used by Russia, Afghanistan, Cambodia, and several African nations, and copied by China and North Korea. The main charge detonates at 1.5 meters, and twice the normal numbers of fragments are directed into the chests and abdomens of the victims.

The OZM-4 is a more modern Russian bounding antipersonnel mine than the OZM-3. It has a cast-iron body, and may be detonated by an electrical line or by a tripwire. The main charge explodes at 0.8 meters, and twice the normal numbers of fragments are directed into the victims' legs and abdomens. This weapon is used by Bloc forces and by Afghanistan, Cambodia, Cuba, Nicaragua, Vietnam, and several African nations.

The OZM-72 modern Russian bounding antipersonnel mine is similar in size to the US M-16A1, including the size of the main charge (deficient in earlier Russian bounding antipersonnel mines). It explodes at a height of 1 meter, directing twice the normal numbers of fragments into the legs and abdomens of the victims. It may be command detonated or tripwire detonated, or by 10kg of direct pressure. It may be defused normally, but is unaffected by overpressure.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
OZM-3	3 kg	$65	Bounding APERS	C1 B4	Nil	2
OZM-4	5 kg	$110	Bounding APERS	C3 B8	Nil	4
OZM-72	5 kg	$275	Bounding APERS	C7 B20	Nil	10

OZM-160

Notes: This is a very large Russian bounding antipersonnel mine. It is command-detonated or by tripwire, and is very difficult to

disarm (two levels harder). It fires a modified artillery shell that explodes at a height of 1.5 meters, and twice the normal numbers of fragments are directed into the chests, abdomens, and heads of the victims. The OZM-150 is very unlikely to be affected by overpressure (1% chance per concussion dice applied to it).

Weapon	Weight	Price	Type	Damage	Penetration	DPV
OZM-160	85 kg	$2400	Bounding APERS	C39 B90	Nil	45

PFM-1

Notes: This is a Russian toepopper mine, commonly known as a "butterfly" or “green parrot” mine due to its shape. It is designed to be scattered from helicopters, fixed-wing aircraft, and FASCAM rounds. Normally finding them is easy by visual inspection, as they are found on the surface of the ground, but in undergrowth, finding them can be difficult. This mine can be found littering the countryside of Afghanistan, as they were used by the millions in that country's war with Russia, and they generally have a long lifespan (they do have a self-destruct mechanism, but it is prone to malfunction). They tend to be carried downstream by water or by a hard rainstorm due to their light weight and the fact that they float. The PFM-1 cannot be disarmed or neutralized except by a blast; they are 30% likely per concussion dice applied to detonate.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
PFM-1	0.08 kg	$1	APERS	C1 B1	Nil	1

PMN

Notes: This is a medium-sized mine. It is a small, plastic-cased, easily concealed mine, usually contact-detonated but capable of using a tripwire. It is in common use by Russian forces, Afghanistan, Iraq, and in Southeast Asia and Africa. It cannot be neutralized before disarming, making defusing tricky (one level harder). 8 kg or pressure is required to detonate it. It has virtually no blast resistance, being 40% likely per concussion dice applied to detonate.

The PMN-2 mine is an improved version of the PMN, and is used by Bloc forces, Afghanistan, Cambodia, Lebanon, Mozambique, and Nicaragua. The main improvement is blast resistance; it is only 15% likely per concussion dice to detonate, though a long pulse blast, such as that of fuel-air explosive, will have a 50% chance per concussion dice to detonate it prematurely. Disarming it requires a specially shaped tool (common in Russian-designed engineer demolitions kits, but very rare otherwise), but other than that, disarming the PMN-2 is basically simple.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
PMN	0.55 kg	$25	APERS	C4 B8	4C	27
PMN-2	0.42 kg	$25	APERS	C4 B8	4C	25

PMD-1

Notes: This is the antipersonnel counterpart of the wooden YaM-5 antitank mine, in that it is also a simple wooden "shoebox" type mine. Similar mines are often assembled in the field by combat engineers and factories such as the Wojo factory in Krakow. The design has been copied by many countries worldwide, and can be found almost anywhere. The mine varies considerably in activation pressure, but 1-10 kg is normal. The PMD-1 may be easily disarmed, but is often booby-trapped.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
PMD-1	0.4 kg	$15	APERS	C3 B6	2C	23

POM-2S

Notes: This is a Russian scatterable antipersonnel mine, dropped by aircraft and FASCAM rocket rounds. It cannot be neutralized or disarmed once armed, except by the very lucky or skilled (Impossible: Combat Engineer roll). It normally sits on top of the ground; when it hits the ground, six legs open and place the mine upright, and two 9.5-meter tripwires shoot out from the mine in opposite directions and anchor themselves in the ground. The mine is designed to self-destruct after 23 hours, but this mechanism often fails. The mine is unlikely to be affected by overpressure (5% chance of a sympathetic detonation per concussion dice applied).

Weapon	Weight	Price	Type	Damage	Penetration	DPV
POM-2S	1.7 kg	$65	APERS	C2 B4	Nil	12

POM-3

Notes: This scatterable bounding APERS mine takes the form of an upright cylinder on six spring-out legs. When scattered, the mine deploys a small parachute so that it lands the proper way up; the legs spring out upon landing so that they embed themselves in soft ground and stay upright on hard ground. A spike then forces itself into the ground below the cylinder. This spike is a seismic sensor; the mine is triggered when a creature or human of at least 25 kilograms treads within 16 meters of the mine. The POM-3 then operates like other bounding APERS mines, with a large grenade firing upwards from the cylindrical mine body and detonating at roughly chest/abdomen height, directing twice the normal number of fragments to those areas on an adult human. The POM-3 is designed to self-destruct after a time; this may be set before scattering or during manual setting for 8 hours or 24 hours.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
POM-3	1.3 kg	$72	Bounding APERS	C2 B8	Nil	3

POMZ-2

Notes: This is a stake mine that can be emplaced quickly but still protrudes from the ground (it is not buried like most mines, although the mine can still be camouflaged). It is detonated by tripwire. The Russians and her allies commonly use the POMZ-2, and it has been copied by China, Cuba, Czechoslovakia, Yugoslavia, North Korean, and Vietnam. The mine is unaffected by overpressure. The normal fuse can be neutralized by inserting a piece of stiff wire through it, but two other fuses often used cannot be neutralized and make defusing one level more difficult. The tripwire requires only 1 kg of pressure to trigger.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
POMZ-2	2.3 kg	$200	APERS	C6 B12	10C	2

PTM-1S

Notes: This scatterable antitank mine is used alongside the PFM-1 in Russian service, often dropped in the same batch by helicopters, fixed wing aircraft, and rocket artillery. It cannot be disarmed or neutralized once armed. It usually has a self-destruct mechanism with a delay of up to 20 hours, but this mechanism is prone to malfunction. Like the PFM-1, these mine are all over the countryside of Afghanistan.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
PTM-1S	2 kg	$50	Antitank	C5 B6	20C	9

SPM

Notes: This is a Russian limpet mine, which can be set for a time delay of 5 minutes to 823 hours. It is normally used for demolition and sabotage. The mine may be disarmed by unscrewing the fuze, but it is still active during this time and may go off. This mine can be used as a detonator for larger explosives. One side of the SPM is a magnet for attachment to steel targets.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
SPM	2.58 kg	$56	Limpet	C9 B18	7C	104

TM-46

Notes: The TM-46 is another steel-cased antitank mine needing at least 120kg of pressure for detonation, or 21 kg if using a tilt-rod. The normal fuze may be easily disarmed, but two other fuses cannot be neutralized once armed, and disarming is two levels more difficult. The TM-46 is very susceptible to overpressure, 30% likely to detonate per concussion dice applied to it. This mine can be booby-trapped with an auxiliary fuse well. The TM-46 is Russian-made, and is copied by China, Egypt, Israel, and North Korea. It is also used by Afghanistan, Cambodia, Iraq, Kuwait (left over by Iraqi forces after the 1991 war), and several African nations.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
TM-46	8.6 kg	$225	Antitank	C20 B24	75C	36

TM-57

Notes: The TM-57 is a large, steel-cased antitank mine needing at least 120kg of pressure for detonation. It is a larger version of the TM-46 mine described above. The fuses used in this mine cannot be neutralized once armed, and disarming the mine is two levels more difficult. The mine may be booby-trapped. The TM-57 is very susceptible to overpressure, being 30% chance of being detonated per concussion dice applied to it. This mine is used in the same places as the TM-46.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
TM-57	8.47 kg	$225	Antitank	C22 B26	83C	40

TM-62M

Notes: This Russian antitank mine is one of the highest-yield mines around, containing 7.2 kg of explosive. The normal fuse requires 200 kg to detonate the mine, but there is also a magnetic fuse that will go off 50% of the time when mine detectors are passed over it, or 10% of the time if a knife blade is used to probe for it. If one has a special key, the mine may be neutralized by even untrained personnel; otherwise, it may be disarmed at one level more difficult than normal. It is susceptible to overpressure if the normal fuse is used; if so, the mine is 25% likely to explode per concussion dice applied to it. This mine has been used throughout the world by Russian and former Russian allies.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
TM-62M	8.5 kg	$225	Antitank	C25 B30	94C	45

TM-72

Notes: This is a newer Russian antitank mine. It is easily detected, but as it has a magnetic fuse, a mine detector is 50% likely to set it off when passed over it, and even a knife blade is 10% likely to set it off if used to probe for it. Neutralizing the mine is an Impossible: Combat Engineer task, and only then can it be disarmed (at normal chances). It is not affected by overpressure. It was used by the Russians in Afghanistan, on the Chinese front, and in Europe. Passing of metal over the mine is required for detonation.

Weapon	Weight	Price	Type	Damage	Penetration	DPV

Weapon	Weight	Price	Type	Damage	Penetration	DPV
TM-72	6 kg	$160	Antitank	C9 B10	33C	16

TM-89

Notes: This is one of the newest Russian antitank mines, introduced in 1993. It has a magnetic fuse that detonates the mine when any vehicle 400 kg or greater passes over it. The mine is 50% likely to go off when a mine detector passes over it, and 10% likely when in direct contact with a mass of metal the size of a knife blade or greater. The TM-89 was exported to several Middle Eastern countries, and was encountered in Iraq and Iran during the war, as well as on the Chinese front. Neutralizing and disarming the TM-89 are both Impossible: Combat Engineer tasks.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
TM-89	11.5 kg	$305	Antitank	C23 B26	86C	42

TMK-2

Notes: The TMK-2 is a Russian antitank mine based on a shaped charge. It is triggered by a tilt rod with 8 kg of pressure. The mine may be easily neutralized, and disarmed at normal chances. It is unaffected by overpressure. This mine is used by Bloc forces and by Angola, Mozambique, and Namibia.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
TMK-2	12.5 kg	$335	Antitank	C11 B12	55C	38

YaM-5

Notes: This is a simple box packed with explosives and fitted with a pressure detonator (150kg to detonate). It is detonated by contact or from a remote position 50 meters away. This mine is no longer used in great numbers by the Pact, but can still be found in the Mideast and Third World. Millions were used by the Soviets in World War II, and they are not much more sophisticated than the Improvised Antitank Mine.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
YaM-5	8 kg	$200	Nonmetallic Antitank	C16 B20	80C	30

Bofors 016

Notes: This is a Swedish off-route mine that was employed in considerable numbers to protect Sweden's borders. It creates an explosively formed projectile, similar to that created by a SADARM mine. Range of the projectile is 100 meters. Hitting a vehicle is an Average: Grenade Launcher or Easy: Combat Engineer task. The projectile is light, but very fast (10,000 meters per combat phase). The weapon may be command detonated or initiated by a tripwire or pressure bag across the path of the target vehicle. Defusing is difficult (one level harder).

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Bofors 016	2.6 kg	$320	Off-Route Antitank	9	45C	Nil

Bofors 028

Notes: This Swedish antitank mine is designed to kill, rather than disable, armored vehicles. It is a magnetic mine, detonated by the passing of a metal mass of at least 750 kg. As a magnetic mine, it may (50% chance) be detonated by the passing of a mine detector over it, or even the probing of a knife blade or similar-sized metal mass (10%) in direct contact. The casing is non-metallic, and the mine is two levels harder to detect by a mine detector. This mine is unaffected by overpressure, or countermeasures such as mine rollers, plows, and flails. It can also distinguish between a genuine vehicle and a magnetic signature duplicator. Disarming this mine is an Impossible: Combat Engineer task unless the proper key is employed (common in engineer demolitions chests of the countries using the mine). This mine is used by Sweden, Germany, Netherlands, and Canada.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Bofors 028	8.4 kg	$75	Plastic Antitank	C8 B20	84C	23

FFV-013

Notes: This is a Swedish directional antipersonnel mine of the Claymore variety, though much larger. The mine may be command-detonated or by tripwire. This mine is used by Sweden, and also produced by Japan and used by Denmark, Norway, and Switzerland. The mine may be easily disarmed once the tripwire is released or the electrical leads are removed. It is unaffected by overpressure. The notched steel front plate disintegrates into about 1200 hexagonal fragments upon detonation.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
FFV-013	20 kg	$1600	Directional APERS	C21 B360D	4C	117

Minimore

Notes: This is a smaller version of the Claymore directional antipersonnel mine. A little over one-third the size of a Claymore, it has half the efficiency of a normal-sized Claymore. The Minimore is in use by most NATO armies.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Minimore	0.6 kg	$100	Directional APERS	C2 B24D	Nil	2

Anti-Helicopter Munition (AHM)

Notes: This mine consists of a sensor to detect a passing helicopter, and a warhead firing an explosively formed projectile, similar to the SADARM. When a helicopter is detected within 1 km, the mine's top portion rotates to engage the helicopter; when the helicopter passes within 200 meters, it fires. Accuracy level is Average. The mine is difficult to defuse (two levels harder), but will not detonate against personnel or ground vehicles. Normal method of disposal is to blow it in place or shoot it from a distance (preferably beyond 200 meters if you are a helicopter; this task is one level more difficult due to the small size of the mine). The AHM is also effective against RPVs and low-flying cruise missiles.

Twilight 2000 Notes: This unusual mine was in advanced development by the US at the time of the Twilight War, and was rushed into production as the war picked up.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
AHM	15.88 kg	$4000	Off-Route Antihelicopter	25	60	Nil

Area Denial Artillery Munition (ADAM)

Notes: These weapons are US-designed antipersonnel mines seeded from FASCAM artillery rounds and aircraft dispensers. Each 155mm round contains 36 of these mines. They are usually used on airfields and roads to prevent their use by aircraft and vehicles; a barrage of these rounds can seed hundreds of mines, and defusing each mine is a Difficult: Combat Engineer task. They are normally used in combination with BLU-91 Gator antitank mines to make a mess of a target area. They are not affected by overpressure.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
ADAM	0.54 kg	$10	APERS	C2 B2	1C	2

BLU-91/B Gator A-T

Notes: This US antitank mine is normally scattered from a cluster bomb, though it may be emplaced from the US truck-mounted Volcano minelayer. As a scattered mine, it normally lays on top of the ground, easily seen. It is magnetically-fused, so only the passing of a vehicle on top of it is required for detonation. A mine detector is 50% likely to set it off, and a knife blade is 10% likely to set it off is used to probe it. This mine was used extensively by the US in Kuwait and Iraq to mine troop concentrations and airfields. It cannot be neutralized, and only the very lucky or skilled may disarm it (Impossible: Combat Engineer roll). The most practical way to destroy a Gator Antitank Mine is to shoot it from a distance, as once armed, they should not be moved. Most are designed to self-destruct after 1-7 days, but these mechanisms sometimes fail. It is unaffected by overpressure.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
BLU-91/B Gator A-T	1.95 kg	$14	Antitank	C1 B4	22C	8

BLU-92/B Gator A-P

Notes: This is the antipersonnel counterpart to the BLU-91/B Gator antitank mine listed above. It is normally scattered in the same bomb or dispenser as the antitank version, in a mix of 72 antitank mine and 22 antipersonnel mines, or in a smaller bomb in a mix of 45 antitank mines and 15 antipersonnel mines. It is set off by the metal in the weapons and gear carried by ground personnel, and will be set off by any mass of metal more than 0.2 kg passing within 1 meter of it. It cannot be neutralized, and only the very lucky or skilled may disarm it (Impossible: Combat Engineer roll, and remember not to wear any metal when doing so!). The most practical way to destroy this mine is to shoot it from a distance. Most self-destruct after 1-7 days, but these mechanisms are known to fail. It is unaffected by overpressure.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
BLU-92/B Gator A-P	1.68 kg	$14	APERS	C6 B10	Nil	8

M1

Notes: The M1 is simply a one-gallon can of chemicals with an explosive charge taped to it. Like the M23, the M1 releases a cloud of gas throughout its burst radius and can be detonated by a tripwire or a remote position.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
M1	10 kg	$1400	Chemical	C6 (B50)	Nil	3

M14

Notes: The M14 is a small antipersonnel mine, designed to affect only one person. It detonates with 9kg of pressure. It is a plastic mine, two levels harder to detect. The mine may be easily neutralized and defused, and is susceptible to overpressure, being 25% likely to detonate per concussion dice applied to it. This mine is US-manufactured, and is also copied by Turkey and Vietnam. It is also used by El Salvador, Iraq, Iran, and several African nations.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
M14	0.1 kg	$2	APERS	C1 B1	2C	12

M15

Notes: This heavy antitank mine explodes when the pressure plate is subjected to more than 160kg of pressure or the tilt rod is tilted more than 15 degrees. Therefore, an individual is unlikely to set it off. The mine can also be detonated from a remote position up to 50 meters away. The arming lever may be easily rotated from "Armed" to "Safe", disarming the mine. It is very susceptible to overpressure, 30% likely to detonate per concussion dice applied to it. This mine is US made, and is also used by Cambodia and several African nations. Tilt rods for this mine have never been reported in Africa. This mine was replaced in US service by the M19 and M21 antitank mines.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
M15	14.3 kg	$100	Antitank	C8 B20	160C	56

M16

Notes: The M16 is a bounding antipersonnel mine. (It has nothing to do with the M16 rifle; the M16 mine is actually a much older design than the M16 rifle.) When triggered, the secondary charge throws a large grenade into the air to a height of about a meter, directing most of its fragments horizontally. Because of this, double the normal of wound points into the abdomen and chest areas. This is the sort of mine is the infamous “Bouncing Betty” feared by soldiers since World War II. It detonates on 3.6 kg or pressure, or by means of a tripwire. It is unaffected by overpressure. The M16A1 is old, but still used by the US and her allies.

The M16A1 has reliability enhancements in the fuze and primary charge, but is otherwise for game purposes identical to the M16.

The M16A2 has several improvements to the fragmentation jacket, fuze train, and fuze well. The fuze well is offset, and the entire mine is much lighter than the M16A1. The fuze of the M16A1 cannot be used in the M16A2 and vice versa, though M16A1s and M16A2s can be connected in series. Despite the weight savings, the explosive charge of the grenade is larger than that of the M16A1 and therefore the M16A2 is more deadly, despite the fact that the M16A2 is less expensive to make due to simplification and updated manufacturing techniques.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
M16/M16A1	3.57 kg	$80	Bounding APERS	C8 B24	Nil	12
M16A2	2.83 kg	$65	Bounding APERS	C9 B25	Nil	13

M18A1 Claymore

Notes: This is a directional antipersonnel mine, spraying 750 balls of 12-Gauge steel shot. The Claymore can be detonated by tripwire or from a remote site, as well as by other more-creative methods, and several mines can be readily linked for series detonation. It is common issue by the US, and variants are in common use by most US allies. It has been copied by dozens of countries, both east and west. The Claymore may be easily disarmed by removing the fuse from the fuse well, but this must be done carefully if the mine is set for tripwire operation. It is unaffected by overpressure.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
M18A1 Claymore	1.58 kg	$250	Directional APERS	C3 B50D	Nil	8

M19

Notes: This mine requires 160kg of pressure to explode. The mine can also be detonated from a remote position up to 50 meters away. This mine is two levels harder to detect magnetically than the M15 or M21. The US and her allies use it, and it has been copied by Chile, South Korea, and Turkey. It is also used by Iran, Iraq, Angola, and Zambia. This mine is susceptible to overpressure (25% likely to be set off per concussion dice applied), and may be easily disarmed by turning the arming lever.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
M19	12.56 kg	$120	Plastic Antitank	C8 B20	160C	56

M21 Metallic

Notes: This mine requires 132 kg to explode, or 1.7 kg of pressure on a tilt rod fuse. The M21 may also use a magnetic fuse or pneumatic tube fuse; if the magnetic fuse is used, the mine will detonate when a vehicle more than 400 kg passes over it. A mine detector is 50% likely to detonate the magnetic fuse, and a knife blade is 10% likely to detonate it if in direct contact with it. The M21 is easily disabled once found, but is totally resistant to overpressure. The mine can be detonated by pressure or a tilt rod, also be detonated from a remote position up to 50 meters away, or by a pneumatic tube up to three meters in length. The US and her allies use it.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
M21 Metallic	8 kg	$100	Metallic Antitank	C4 B16	80C	37

M23

Notes: This mine releases a cloud of gas. It requires 150kg of pressure to detonate.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
M23	12 kg	$1600	Chemical	C4 (B30)	Nil	2

M24 Off-Route

Notes: This mine fires a shaped charge against the side of the vehicle which rolls over a 3-meter-wide pneumatic detonator, or it

can be set off from a remote position up to 30 meters away. There is a 70% chance that the charge will hit the vehicle's suspension, otherwise the charge hits the hull side. Hitting the vehicle is an Average: Grenade Launcher or an Easy: Combat Engineer task. The rocket used in this mine is a modified round from a Bazooka.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
M24	8.2 kg	$1000	Off-Route Mine	C4 B4	55C	Nil

M25

Notes: This is a shaped charge designed to direct the bulk of its energy straight up when stepped on, and it affects only the individual who triggers it. The US and her allies use it.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
M25	0.1 kg	$20	Shaped Charge APERS	C1 B1	4C	0.6

M26

Notes: This is another bounding antipersonnel mine. It is a newer mine than the M16A1, but is not yet in common use, even in the US. It detonates on contact (12.7 kg pressure) or by one of 4 tripwires (6.4 kg pressure). The main charge detonates at 2 meters, spraying twice the normal number of fragments into the heads and chests of the victims. This mine may be detected normally, but is one level harder than normal to defuse.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
M26	1 kg	$80	Bounding APERS	C4 B12	Nil	3

M66

Notes: This mine is similar to the M24 mine, but is detonated when the vehicle interrupts a beam of light directed between two sensors (like a supermarket door opener), or is remotely detonated. Naturally, anything breaking the beam (such as a person) will detonate the mine.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
M66	10 kg	$1500	Off-Route Antitank	C4 B6	55C	Nil

M88 Pursuit Denial Munition (PDM)

Notes: This mine, related to the Area Denial Artillery Munition, is designed to be used by Special Operations forces and patrols to foil pursuit by enemy forces. They are easily set and can be simply dropped in the enemy's path. They are small (57x85mm) and easily missed by a rapidly moving group of soldiers. Disarming a PDM is a base Difficult: Combat Engineer task, and they are immune to overpressure. Once the safety pin is pulled, the mine becomes active 5 combat phases later.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
M88 PDM	0.54 kg	$10	APERS	C2 B2	1C	2

Mk 1 Limpet Mine

Notes: This is a small limpet mine using the Mk 36 Mod 1 demolitions charge (see Explosives page) as a base. There are three types of this mine used today: the Mod 2, which uses the Mk 39 Safety and Arming device with the Mk 23 Mod 1 firing device; the Mod 2 also incorporates a Mk 24 Mod 2 antidisturbance device which will cause the mine to explode if tampered with once it is set (unless disabled). This antidisturbance device cannot be seen from outside the mine. The Mod 2 firing device has a mechanical clockwork time delay device which may be set to cause the mine to go off 15-180 minutes later. The Mk 1 Mod 3 version is similar to the Mod 2, but it uses a Mk 48 Mod 0 firing device which incorporates an electronic timer with a delay of 15 minutes to 72 hours. The Mk 1 Mod 4 version is a simple, "economy" version of this mine, with the Mk 23 Mod 1 firing device, the Mk 39 Mod 0 Safety and Arming device, and no antidisturbance device or measures.

All of these versions of the Mk 1 Limpet Mine are fitted with a black foam plastic float which fits snugly over the mine, covering the entire mine except the base of the mine and fuze well. This gives the mine neutral buoyancy in salt water, or slightly positive buoyancy in fresh water. The base of the mine has a powerful ring-shaped magnet around it for application to the target ship. In addition to the delay set on the timer, the mines have an arming delay of 10-15 minutes, though this may be bypassed.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Mk 1 Mod 2 (Above Water)	5.87 kg	$207	Limpet Mine	C18 B46	35C	13
Mk 1 Mod 2 (Below Water)	5.87 kg	$207	Limpet Mine	C18 B46	40C	13
Mk 1 Mod 3 (Above Water)	6.15 kg	$228	Limpet Mine	C18 B46	35C	13
Mk 1 Mod 3 (Below Water)	6.15 kg	$228	Limpet Mine	C18 B46	40C	13
Mk 1 Mod 4 (Above Water)	5.51 kg	$194	Limpet Mine	C18 B46	35C	13
Mk 1 Mod 4 (Below Water)	5.51 kg	$194	Limpet Mine	C18 B46	40C	13

SADARM (Sense And Destroy ARMor)

Notes: This FASCAM mine is a nasty little surprise. When deployed, it senses vehicles when they come within 50 meters and

launches a submunition into the air. The munition wobbles; searching for the vehicle, then fires an explosively formed projectile at the thin top armor. There is an 80% chance of hitting the overhead aspect only. The SADARM is available as a 155mm round (6 submunitions), a 203mm round (9 submunitions), or an MLRS round (12 submunitions).

Weapon	Weight	Price	Type	Damage	Penetration	DPV
SADARM	7.5 kg	$1125	Antitank Submunition	C3 B4	25C (TA)	2

Selectable Lightweight Attack Munition (SLAM)

Notes: This is another small mine developed for US and her allies for use by Special Operations forces. It may be used as a conventional antipersonnel or antivehicle mine, an off-route mine, or as a small demolitions charge. In the first mode, the SLAM is triggered by a magnetic fuse that detonates the mine when more than 10 kg of metal passes over the mine. In off-route mode, the mine is triggered by an infrared sensor, and has a range of 7.5 meters. As a demolitions charge, the mine may be triggered by a timer. A simple switch changes modes. Once armed, the mine is one level harder than normal to defuse. It is unaffected by overpressure. The SLAM is small enough to be carried in a uniform pocket.

Twilight 2000 Notes: Though these mines were much in demand, they were produced only as an experiment before the Twilight War, and are rarely seen outside the Special Operations communities of the US and her allies.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
SLAM	1 kg	$120	Combination Mine	C3 B4	10C	5

Trip Flare

Notes: The flare is activated by a tripwire and shoots a magnesium flare straight up. It is most commonly used to signal the presence of an enemy, alerting sentries and illuminating the area. It works best at night. The flare burns for 90 seconds.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Trip Flare	1 kg	$15	Trip Flare	(B300)	Nil	Nil

Trip Whistle

Notes: This is similar to the trip flare, but is smaller and produces a high-pitched whistle for 30 seconds (6 phases). The burst radius is the area in which the whistle can be heard.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Trip Whistle	0.5 kg	$15	Trip Whistle	(B1200)	Nil	Nil

Trip Flare/Whistle

Notes: This device simply produces the effects of both of the above.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
Trip Flare/Whistle	1 kg	$40	Trip Flare/Whistle	(B300/1200)	Nil	Nil

PROM-1

Notes: This bounding APERS mine is a progressive development of the World War 2 Nazi S-mine, and except for more modern manufacture and explosive, the PROM-1 is similar to the S-mine. The PROM-1, like most bounding APERS mines, is triggered by pressure on one or more of exposed prongs at the top of the mine. The user buries the mine almost completely except for the prongs, then removes the safety clip. Like many bounding APERS mines, the PROM-1 does have an option for use with a tripwire. Treading on one of the prongs causes a large grenade to jump into the air to a height of about a meter, then it detonates, spraying fragments in all directions in a wide area. Due to the height at which it detonates, twice the normal number of fragments will hit the abdomen and legs of victims. The PROM-1 contains a large amount of steel and is easily detected by mine detectors, but the plastic of the prongs is generally green in color and they are not easy to spot in undergrowth. The PROM-1 can be difficult to defuse, particularly if the mine has been in place for months, because the fuze becomes unstable over time and the PROM-1 can detonate at the slightest touch or even without being triggered. Normal disposal of the PROM-1 is to blow it in place. The PROM-1 kit includes three 6.1-meter tripwires. Tripwires operate on 3 kilograms of pressure, while the prongs require 9 kilograms of pressure to trigger.

Weapon	Weight	Price	Type	Damage	Penetration	DPV
PROM-1	3 kg	$68	Bounding APERS	C9 B30	Nil	14